Evaluation of an extended stroke rehabilitation service (EXTRAS): a multi-centre randomised controlled trial

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Background
Stroke survivors frequently report unmet needs in the longer term but there is limited evidence to guide provision of on-going rehabilitation.

Methods
This study was a randomised controlled trial involving 19 UK centres which provided ESD. Adult stroke patients were individually randomised to receive EXTRAS or usual care (1:1). EXTRAS involved five rehabilitation reviews provided by an ESD team member between one and 18 months post-ESD. Reviews consisted of a semi-structured assessment of rehabilitation needs followed by goal setting and action planning. The primary outcome was performance in extended activities of daily living (Nottingham Extended Activities of Daily Living (NEADL) scale) at 24 months. Secondary outcomes included satisfaction with services, QALYs and costs. Analyses were 'intention to treat'.

Results/Findings
573 participants were randomised (EXTRAS n=285, usual care n=288). Mean 24 month NEADL scores were EXTRAS 40.0 (SD 18.1) and usual care 37.2 (SD 18.5) giving an adjusted mean difference of 1.8 (95% CI -0.7 to 4.2). At 24 months patients in the intervention group were more satisfied with the services they received (97.7% vs 87.5%, difference 10.2% (95% CI 5.3 to 15.0)). EXTRAS provided more QALYs (0.07, 95% CI 0.01 to 0.12) and when combined with costs, there was a 90% chance of EXTRAS being cost-effective at conventional thresholds of willingness to pay (£20,000 per QALY).

Conclusion
EXTRAS did not improve stroke survivors' performance in extended activities of daily living. However, due to the impact on costs and QALYs, EXTRAS has a high probability of being cost-effective at conventional thresholds of NHS willingness to pay.